Complete Summary

GUIDELINE TITLE

Common infections in the long-term care setting.

BIBLIOGRAPHIC SOURCE(S)

American Medical Directors Association (AMDA). Common infections in the long-term care setting. Columbia (MD): American Medical Directors Association (AMDA); 2004. 34 p. [21 references]

GUIDELINE STATUS

This is the current release of the guideline.

COMPLETE SUMMARY CONTENT

SCOPE
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SCOPE

DISEASE/CONDITION(S)

- Urinary tract infection
- Respiratory infection
- Gastrointestinal infection
- Skin infection

GUIDELINE CATEGORY

Diagnosis
Evaluation
Management
Prevention
Risk Assessment
Treatment

CLINICAL SPECIALTY

Family Practice
Geriatrics
Infectious Diseases
Internal Medicine
Nursing

INTENDED USERS

Advanced Practice Nurses
Allied Health Personnel
Dietitians
Health Care Providers
Nurses
Occupational Therapists
Pharmacists
Physical Therapists
Physician Assistants
Physicians
Social Workers

GUIDELINE OBJECTIVE(S)

- To improve the quality of care for patients with common infections in the long-term care settings
- To guide care decisions and to define roles and responsibilities of appropriate care staff

TARGET POPULATION

Residents of long-term care facilities

INTERVENTIONS AND PRACTICES CONSIDERED

Diagnosis/Assessment

1. Initial nursing assessment of a suspected infection including vital signs, mental status, lung sounds, pulse oximetry, dipstick urine test, skin and wound examination, bowel sounds, stool and vomitus inspection, and assessment of symptoms
2. Assessment of risk factors for infection
3. History, physical examination, and appropriate laboratory tests, such as stool culture for enteric pathogens, chest X-ray, skin scrapings for suspected scabies, urinalysis, urine culture and sensitivity
4. Assessing whether the patient's condition warrants transfer to a hospital
5. Assessing whether the patient's condition warrants implementation of infection control precautions (standard and transmission-based)

Management/Treatment/Prevention

1. Treating symptoms of infection including antifever medication (e.g., acetaminophen), monitoring nutritional status, blood glucose levels in patients with diabetes, volume depletion and electrolyte imbalance in patients with diarrhea
2. Prescribing appropriate antibiotic therapy
3. Monitoring patient's progress
4. Containing and identifying outbreak of the infection
5. Immunization program for all facility residents including influenza, pneumococcal, and tetanus/diphtheria vaccination
6. Facility-wide infection control program including hygiene practices, outbreak control procedures, resident health programs, and reporting of diseases to public health authorities
7. Monitoring the management of infections in the facility using an effective infection control program
8. Monitoring antibiotic use in the facility

MAJOR OUTCOMES CONSIDERED

- Risk and incidence of common infections in the long-term care setting
- Morbidity and mortality related to infections in long-term care settings
- Incidence of transfer of patients with infections from long-term care settings to acute-care settings
- Health care costs
- Antibiotic resistant infections in the long-term care setting

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Not stated

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Expert Consensus

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

METHODS USED TO ANALYZE THE EVIDENCE

Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Interdisciplinary workgroups developed the guidelines, using a process that combined evidence and consensus-based approaches. Workgroups included practitioners and others involved in patient care in long-term care facilities. Beginning with a general guideline developed by an agency, association, or organization such as the Agency for Healthcare Research and Quality (AHRQ), pertinent articles and information, and a draft outline, each group worked to make a concise, usable guideline tailored to the long-term care setting. Because scientific research in the long-term care population is limited, many recommendations were based on the expert opinion of practitioners in the field.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

External Peer Review
Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

All American Medical Director Association (AMDA) clinical practice guidelines undergo external review. The draft guideline is sent to approximately 175+ reviewers. These reviewers include American Medical Director Association physician members and independent physicians, specialists, and organizations that are knowledgeable of the guideline topic and the long-term care setting.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

The algorithm Infection Management is to be used in conjunction with the clinical practice guideline. The numbers next to the different components of the algorithm correspond with the steps in the text. Refer to the "Guideline Availability" field for information on obtaining the full text guideline.

CLINICAL ALGORITHM(S)

An algorithm is provided for Infection Management.

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The guideline was developed by an interdisciplinary work group using a process that combined evidence- and consensus-based thinking.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

- Earlier identification and more appropriate treatment of patients with infection
- Fewer outbreaks and transmissions of infection within the facility
- A reduction in the inappropriate use of antibiotics
- A reduction in the number of patients with infections who are transferred to acute-care settings
- A reduction in direct and indirect patient care costs as a result of more appropriate resource utilization

POTENTIAL HARMS

Adverse Effects of Medications

The use of antibiotics increases the risk for potentially harmful drug interactions in addition to the adverse effects associated with antibiotics themselves.

QUALIFYING STATEMENTS

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- This clinical practice guideline is provided for discussion and educational purposes only and should not be used or in any way relied upon without consultation with and supervision of a qualified physician based on the case history and medical condition of a particular patient. The American Medical Directors Association and the American Health Care Association, their heirs, executors, administrators, successors, and assigns hereby disclaim any and all liability for damages of whatever kind resulting from the use, negligent or otherwise, of this clinical practice guideline.
- The utilization of the American Medical Director Association's Clinical Practice Guideline does not preclude compliance with State and Federal regulation as

well as facility policies and procedures. They are not substitutes for the experience and judgment of clinicians and care-givers. The Clinical Practice Guidelines are not to be considered as standards of care but are developed to enhance the clinician's ability to practice.

Long-term care facilities care for a variety of individuals, including younger patients with chronic diseases and disabilities, short-stay patients needing postacute care, and very old and frail individuals suffering from multiple comorbidities. When a workup or treatment is suggested, it is crucial to consider if such a step is appropriate for a specific individual. A workup may not be indicated if the patient has a terminal or end-state condition, if it would not change the management course, if the burden of the workup is greater than the potential benefit, or if the patient or his or her proxy would refuse treatment. It is important to carefully document in the patient's medical record the reasons for decisions not to treat or perform a workup or for choosing one treatment approach over another.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

The implementation of this clinical practice guideline (CPG) is outlined in four phases. Each phase presents a series of steps, which should be carried out in the process of implementing the practices presented in this guideline. Each phase is summarized below.

I. **Recognition**
- Define the area of improvement and determine if there is a CPG available for the defined area. Then evaluate the pertinence and feasibility of implementing the CPG.

II. **Assessment**
- Define the functions necessary for implementation and then educate and train staff. Assess and document performance and outcome indicators and then develop a system to measure outcomes.

III. **Implementation**
- Identify and document how each step of the CPG will be carried out and develop an implementation timetable.
- Identify individual responsible for each step of the CPG.
- Identify support systems that impact the direct care.
- Educate and train appropriate individuals in specific CPG implementation and then implement the CPG.

IV. **Monitoring**
- Evaluate performance based on relevant indicators and identify areas for improvement.
- Evaluate the predefined performance measures and obtain and provide feedback.

Facilities must implement a variety of strategies to control infections. Key indicators of an organizational commitment to infection control include the following:

- Establishment of an interdisciplinary infection control team that has designated leadership, accountability, and regular meetings
- Implementation of a comprehensive program to control, identify, and manage infections
- Routine admission assessment for tuberculosis and immunization status for pneumococcal pneumonia and influenza
- Standing orders for the administration of required immunizations on admission (if applicable, depending on state law)
- Implementation of policies that encourage and facilitate regular hand washing (e.g., provision of waterless hand-sanitizing products, monitoring of soap dispensers)
- Implementation of protocols to maintain residents' skin integrity (e.g., appropriate skin care, accountability for turning residents and examining skin)
- Implementation of protocols for the prudent use of invasive devices (e.g., urinary catheters, intravenous lines)
- Implementation of protocols that encourage prudent antimicrobial prescribing. In selected long-term facilities, a more intensive antimicrobial utilization program may be developed, including review of antibiotic appropriateness.
- Designation of an infection control coordinator who has sufficient time and appropriate training for the role
- Implementation of a staff training program in infection control

IMPLEMENTATION TOOLS

Clinical Algorithm
Tool Kits

For information about availability, see the "Availability of Companion Documents" and "Patient Resources" fields below.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better
Staying Healthy

IOM DOMAIN

Effectiveness
Patient-centeredness
Safety

IDENTIFYING INFORMATION AND AVAILABILITY

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American Medical Directors Association (AMDA). Common infections in the long-term care setting. Columbia (MD): American Medical Directors Association (AMDA); 2004. 34 p. [21 references]

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2004

GUIDELINE DEVELOPER(S)

American Medical Directors Association - Professional Association

SOURCE(S) OF FUNDING

American Medical Directors Association

GUIDELINE COMMITTEE

Steering Committee

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FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

This is the current release of the guideline.

GUIDELINE AVAILABILITY

Electronic copies: None available

Print copies: Available from the American Medical Directors Association, 10480 Little Patuxent Pkwy, Suite 760, Columbia, MD 21044. Telephone: (800) 876-2632 or (410) 740-9743; Fax (410) 740-4572. Web site: www.amda.com

AVAILABILITY OF COMPANION DOCUMENTS

The following are available:

- Guideline implementation: clinical practice guidelines. Columbia, MD: American Medical Directors Association, 1998, 28 p.
- We care: implementing clinical practice guidelines tool kit. Columbia, MD: American Medical Directors Association, 2003.

Electronic copies: None available

Print copies: Available from the American Medical Directors Association, 10480 Little Patuxent Pkwy, Suite 760, Columbia, MD 21044. Telephone: (800) 876-2632 or (410) 740-9743; Fax (410) 740-4572. Web site: www.amda.com.

PATIENT RESOURCES

None available

NGC STATUS

This NGC summary was completed by ECRI on March 14, 2005. The information was verified by the guideline developer on April 19, 2005.

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DISCLAIMER

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Readers with questions regarding guideline content are directed to contact the guideline developer.

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